

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,805	12/27/2001	Hiroyuki Kurata	2342-131P	1377
2292	7590 10/06/2004		EXAMINER	
BIRCH STE PO BOX 747	EWART KOLASCH &	MCCLENDON, SANZA L		
FALLS CHURCH, VA 22040-0			ART UNIT	PAPER NUMBER
			1711	
			DATE MAILED: 10/06/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Applicat	tion No.	Applicant(s)	
	10/026,8	805	KURATA ET AL.	
Office Action Summary	Examine		Art Unit	
		McClendon	1711	
The MAILING DATE of this communicate				ddress
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA  - Extensions of time may be available under the provisions of 31 after SIX (6) MONTHS from the mailing date of this communic  - If the period for reply specified above is less than thirty (30) da  - If NO period for reply is specified above, the maximum statutor  - Failure to reply within the set or extended period for reply will,  Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no e ation. rys, a reply within the structure priod will apply and by statute, cause the apply and statute.	event, however, may a reply be attutory minimum of thirty (30) will expire SIX (6) MONTHS for the property of the spire ARANDO	e timely filed  days will be considered time rom the mailing date of this	ely. communication.
Status				
1) Responsive to communication(s) filed o	n <u>17 June 2004</u> .			
	This action is	non-final.		
3) Since this application is in condition for	allowance excep	t for formal matters,	prosecution as to th	e merits is
closed in accordance with the practice t				
Disposition of Claims				
4)⊠ Claim(s) <u>1-20</u> is/are pending in the appl	ication		_	
4a) Of the above claim(s) is/are w		onsideration <		
5) Claim(s) is/are allowed.	initial and the second	sholderation.		
6)⊠ Claim(s) <u>1-20</u> is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction	and/or election	requirement.		
Application Papers		·		
9)☐ The specification is objected to by the Ex	vaminer			
10) The drawing(s) filed on is/are: a)		\□ abjected to by th	o Eveminer	
Applicant may not request that any objection				
			• •	FD 4 4044 II
Replacement drawing sheet(s) including the 11) The oath or declaration is objected to by				
	the Examiner. 14	ote the attached Offi	Ce Action of form P	10-152.
Priority under 35 U.S.C. § 119				
12)⊠ Acknowledgment is made of a claim for f	oreign priority ur	nder 35 U.S.C. § 119	(a)-(d) or (f).	
a)⊠ All b)□ Some * c)□ None of:				
<ol> <li>Certified copies of the priority doc</li> </ol>	uments have bee	en received.		
<ol><li>Certified copies of the priority doc</li></ol>	uments have bee	en received in Applic	ation No	
<ol><li>Copies of the certified copies of the</li></ol>	e priority docum	ents have been rece	ived in this National	Stage
application from the International	Bureau (PCT Ru	le 17.2(a)).		
* See the attached detailed Office action fo	r a list of the cert	ified copies not recei	ved.	
Attachment(s)			•	
1) Notice of References Cited (PTO-892)		4) Interview Summa	ry (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-9	148)	Paper No(s)/Mail	Date	
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/ Paper No(s)/Mail Date 6/04.</li> </ol>	/SB/08)	5) Notice of Informa 6) Other:	Patent Application (PT)	O-152)
S. Patent and Trademark Office TOL-326 (Rev. 1-04)	ffice Action Summa	<del></del>	Port of Dance No. (b4. 11.)	D-1- 0202004
, ,	so rouvii Juiililla	·· y	Part of Paper No./Mail i	uale 930∠004

Application/Control Number: 10/026,805

Art Unit: 1711

#### DETAILED ACTION

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on June 17, 2004 has been entered.

#### Allowable Subject Matter

2. Prosecution on the merits of this application is reopened on claims 1·20 are considered unpatentable for the reasons indicated below:

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1·20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al (JP 63·248807) in view of Yagi et al (JP 03·163182) and Yutaka et al (JP 04·028772).

Art Unit: 1711

Note: information is taken from the abstracts of each cited documents. A translation has been sent for, wherein once made available a copy will be provided to applicant.

Yamamoto et al teaches photosetting compositions usable as adhesive or sealant for optical instruments. The composition of Yamamoto et al comprises (A) a monomer having fluoroalkyl groups and (meth) acrylate groups and can be represented by the structural formula found in the abstract and those found in table 1 (pages 4-5), (B) a fluorine-containing polymer, such as a polymer composed of mainly fluoroalkyl (meth) acrylate, (C) a crosslinking acrylate monomer, and (D) a photoinitiator. Wherein said formula and compounds of table 1 anticipates at least one of the fluorine containing monomers of instant claims 1, 4-5, 12-14. Yamamoto et al does not expressly teach using fluorine containing monomers having the general formula (2).

Yutaka et al teaches UV curable difunctional fluorine containing acrylic monomers in combination with fluorine containing polymers are well known in the adhesive art. Said di-functional fluorinated (meth) acrylate monomers can be found on page 5 both columns. Yamamoto et al and Yutaka et al are analogous art because they are from the same field of endeavor that is the art of fluorine containing UV curable adhesives. Therefore one of ordinary skill in the art at the time of the invention would have found it obvious to use the monomers as taught by Yutaka et al in the composition as taught by Yamamoto et al. The motivation would have been a reasonable expectation of obtaining an adhesive composition with adequate crosslinking to provide the desired adhesive strength upon curing in the absence of evidence and/or unexpected results. Therefore the combination of references renders claims 15-17 obvious.

Yamamoto et al does not expressly teach a copolymer comprising the structural units claimed by applicant. Yagi et al teaches adhesive compositions are prepared by dissolving an acrylic monomer soluble fluorocarbon polymer in an acrylic monomer, polymerizing the solution, and optionally further converting the polymer into an interpenetrating network. Yagi et al teaches the fluorocarbon polymer can be copolymer or terpolymers comprising vinylidene fluoride, such as tetrafluoroethylene/tetrafluoropropylene/vinylidene fluoride terpolymer—see page 2, lines 10-15. In addition, Yagi et al teach the acrylic monomers such as methyl methacrylate and

Art Unit: 1711

fluorinated acrylic monomers. The examiner deems that Yagi et al shows that adhesives comprising fluorinated polymers and fluorinated monomers are well known in the art.

Yamamoto et al and Yagi et al are analogous art because they are from the same field of endeavor that is the art of fluorinated acrylic adhesive compositions.

Therefore it would have been obvious for an artisan of ordinary skill in the art at the time of the invention to use the vinylidene copolymers of Yagi et al in the adhesive composition as taught by Yamamoto et al. The motivation would have been a reasonable expectation of obtaining an adhesive composition having adequate heat resistance, good transparency, and good adhesivity as taught by both Yamamoto et al and Yagi et al in the absence of unexpected results and/or convincing arguments to the contrary.

Yamamoto et al and Yagi et al do not expressly teach using said adhesive for the production of a pellicle. However, it is well-known in the art of pellicle films to adhere a pellicle films to pellicle frames using fluorinated adhesive composition as disclosed in the description of the Related Art section. Therefore it would have been obvious for an artisan of ordinary proficiency to use the combined teachings of Yamamoto et al and Yagi et al to produce a pellicle. In addition to it being common knowledge in the pellicle art, Yamamoto et al teaches using said fluorinated adhesives as sealant and adhesives for optical instruments, wherein the pellicles would be included the broad disclosure of optical instruments.

The combination of references is deemed to render the invention of claims 1·8 and 12·17 obvious. Claims 18·20 are rejected because they do not further limit claims 1, 4, or 5. Claims 1, 4, and 5 are deemed to be unpatentable over the combination of reference because the combination teaches at least one or two of the fluorine containing monomers found in the instant claims. The combination of references does not expressly teach the ratio of polymer to monomer as found in instant claims 9·11; however since applicant has failed to establish the criticality of said ratio's, the examiner believes the adhesive would have worked equally as well with any ratio in the absence of evidence to the contrary. In addition, the examiner deems that it would have been within the skill level of a ordinarily skilled artisan to calculate the instantly claimed ratio. The motivation would have been a reasonable expectation of obtaining satisfactory bond strengths between the pellicle frame

Art Unit: 1711

and pellicle film after cure in the absence of evidence to the contrary and/or unexpected results.

### Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Sanza L McClendon 9/29/M

Examiner

Art Unit 1711

SMc